

ISD News and Views

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Table of Contents

Term Contract	2
Laser Printer RFP	2
Hardware Term Contract	
Changes	2
Maintenance Term Contract	
Changes	3
Term Contract Mailing List	3
Term Contract Usage	3
IBM Invoicing	4
Trade-In Offer From IBM	4
Information Center's Equipment	
Pool	4
Mainframe	4
CICS and IDMS Security	4
Installation of CICS 1.7	5
Microcomputers	5
Free Software!	5
LOTUS DATABASE CLASS: Is	
there a need?	6
AGENCY SECURITY OFFICERS	7
Training	9
Training Information	9
Training Calendar	10
Miscellaneous Training	11
Data Network Classes	12
Microcomputer Classes	13

Letter From the Editor

Some of you may have noticed the change of editors on the last newsletter. Teri Lundberg, the previous editor, has moved into the networking area and I have been given the opportunity to take over as editor.

In the coming months you will see some changes-pleasant changes I hope. Some of the things you may see include slight formatting or content changes. Please let me know what you think along the way. Also, if any of you would like to see something in the newsletter that we have not attempted in the past, again, let me know.

Melanie Coughlin
Editor

HAROLD CHAMBERS
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DEADHEAD

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Term Contract

Laser Printer RFP

Laser Printer products proposed under RFP #070-B are continuing to undergo testing and evaluation in Information Services. In an effort to provide a quick and efficient ordering vehicle for end of the year Hewlett Packard (HP) laser printer requirements, ISD has worked with Purchasing to establish an interim Estimated Needs Contract for the many HP requisitions that have come through ISD for processing in the last several weeks, and additional HP requirements that are anticipated. The contract will be awarded based on bids received in response to IFB #9252-B which requests firm prices effective through June 30, 1989.

Agencies wishing to purchase HP Laser Jet Series II or IID printers (bids for some ancillary items such as additional memory and envelope feeders have also been requested), are requested to prepare a requisition citing the desired HP model and IFB #9252-B, accompanied by the standard justification form. Please forward this documentation to ISD for review and processing through Purchasing. Purchasing anticipates accepting requisitions, against IFB #9252-B ONLY, through June 1, 1989.

Hardware Term Contract Changes

Be advised that since the publication of the latest Term Contracts, IBM, ISC, and Zenith have revised item availability in some cases.

IBM has withdrawn the PS/2 Model 50, decreased the Term Contract prices of certain microcomputers, and withdrawn and added printers as follows:

8550-021	PS/2 Model 50, 20MB, 1.4MB Dkt WITHDRAWN 5/3/89
8550-031	PS/2 Model 50Z, 30MB, 1.4MB Dkt \$2,242.00
8550-061	PS/2 Model 50Z, 60MB, 1.4MB Dkt \$2,409.00
8570-E61	PS/2 Model 70, 60MB, 16 mhz \$3,626.70
4207-001	Proprinter X24, 24-pin WITHDRAWN 4/10/89
4207-002	Proprinter X24E, 24-pin \$ 656.27
4208-001	Proprinter XL24, 24-pin WITHDRAWN 4/10/89
4208-002	Proprinter XL24E, 24-pin \$ 875.27

Other IBM changes in addition to those shown above, will be distributed to agencies in approximately one week.

Zenith has advised the State that prices of 286 desktop systems have come down. Also, some price reductions in laptops are in effect. Zenith introduced a new 12 MHz 286LP, 20 Mb system.

All of the above term contract changes will be set forth in revisions to the current micro contracts, to be released May 1989. Please call Debbie Owen in the Resource Management Unit (444-2930) with any questions or concerns.

Maintenance Term Contract Changes

Tech Services has advised the State that they are no longer an approved Warranty Site for Zenith products. However, Tech Services remains the maintenance term contract vendor. The new Zenith warranty repair site is Computer Systems and Maintenance in Bozeman. To obtain a return authorization number call Computer Systems and Maintenance at 587-8789. Warranty service will be provided on a carry-in basis where the agency is responsible for shipping the equipment to Bozeman. CSM will ship the repaired equipment back via UPS unless the agency is willing to authorize and pay for priority shipment via bus. Please report any problems or concerns due to this change to Debbie Owen (x2930) or Amy Palmer (x2868) in the Resource Management Unit.

Term Contract Mailing List

D.P. Managers and Purchasing Personnel

Please help us clean up the Term Contract Mailing List, so that those that need to get copies are getting them and those that don't need copies are dropped from the list. Approximately 200 copies of each Term Contract are distributed to agencies and Universities. Please determine who

most needs hard copies of the Term Contract in your agency (one copy in a central location perhaps), and notify Anita Buchanan in Purchasing at x2575 with your revised distribution requirements (please provide individual names and titles). Anita is also able to help identify current contract distributions to your agency.

Term Contract Usage

With the increasingly competitive computer industry, catalog vendors, and the recent news of price drops in the area of Intel chips, Resource Management Unit has received some questions concerning the requirements for agencies to use the State Term Contracts. While it is intended that the Term Contracts provide a time-saving, competitively determined products and price list, use of the Term Contracts is not mandatory. There are reputable "clone" and brand name vendor products available in the marketplace that may offer more advantageous pricing, but due to lack of technical support, compatibility, and/or stability of pricing, are unwilling to offer yearly term contracts to the State.

Please remember that the Department of Administration will provide connections and support for term contract equipment to both local token ring networks and to the statewide SNA network. Other microcomputers may be attached to these networks, but compatibility is not guaranteed and problem resolution support is not provided.

Please review recent IBM invoices. In cases where products were ordered prior to the February 28, 1989 expiration of the previous IBM term contract, the last year's term contract prices are to be billed. We have been notified of two (2) cases where this has not occurred. Please call Pete Aspinwall (444-5052) at IBM if you experience this billing problem. IBM has been helpful in resolving these problems.

Trade-In Offer From IBM

If you have an IBM display station (terminal), you can get \$100 credit towards the purchase of an IBM PS/2 System or RT System. The following display station models fall under the trade-in program: 3275, 3276, 3277, 3278, 3279, 3178, 3179, 3180, 8775, 5152, 5291 and 5292.

If you have any questions regarding this Trade-In Program, please contact Pete Aspinwall (444-5052) of IBM.

Information Center's Equipment Pool

ICB has two Zenith 286 Laptop computers for rent. These PCs are quite portable, being slightly smaller than a briefcase in size. They currently have WordPerfect 4.2 and 5.0 installed.

These PCs comes with a carrying case, a battery pack that allows you to run the PC for about 2 hours. Cords are provided to plug the portable into a 110V, grounded-wall outlet. This will charge the battery

pack and provide power to run the PC. If you are traveling, we have an adaptor that plugs into a cigarette lighter for charging the battery pack.

The charge for renting a portable is \$50.00 per week. If you have any questions or are interested in using a portable, please call Melanie of the Information Center at 2973.

Mainframe

CICS and IDMS Security

Since the installation of the ACF2 security software at ISD, it has been the intent that ACF2 would eventually be used to control access to CICS and IDMS. We are now ready to begin the implementation of ACF2 in this fashion. This will affect the manner in which each user gains access to CICS and IDMS.

Each individual user will be required to have a unique, standard ACF2 LOGONID. You may obtain this LOGONID from your agency's security officer. Your security officer will define your LOGONID so that you are granted access to the CICS regions and IDMS Central Versions as required to perform your job. This ACF2 LOGONID is currently used by TSO users. Therefore, if you are a TSO user who has been assigned your own LOGONID, you do not need to be assigned a new LOGONID but will need to contact your security officer so that your current LOGONID is redefined properly.

Except for TEST CICS, this change in the method used to gain access to CICS and IDMS will not take effect

immediately. (TEST CICS has already been converted although the use of old LOGONID's is still permitted.) You will be informed as to when it will take effect and will be given more detailed information concerning this change. In preparation for this change, the main concern at this time is that all users have been assigned properly defined LOGONID's.

Installation of CICS 1.7

The installation of CICS 1.7 has been successfully completed on System A. CICS 1.7 has brought several new features in house, the most important being the ability for application programs to make use of the extended addressing provided by MVS/XA. Other enhancements include implicit VERIFY for VSAM files, improved alternate index handling, and expanded function in the command level interface.

The need for a "fileless" night CICS has been eliminated. A utility program has been written to run at 5:30 p.m. and again at 11:00 p.m. to close and release all application files. File control has been improved in that the application files are no longer specified via JCL DD statements; they are defined in the File Control Table and are not opened until the first reference, thereby eliminating JCL errors and improving start-up time respectively.

Now that CICS 1.7 is running in production, the assembly and compile procedures will be modified to point to the CICS 1.7 source and macro libraries effective May 5, 1989. This may cause some problems, especially for macro level

programs. Our strong recommendation is that all macro level programs be rewritten to use the command level EXEC interface as soon as possible. IBM has indicated that the macro level interface will be phased out with the next release of CICS.

CICS 1.7 will be scheduled for installation in the Justice systems after MVS/XA has been installed on the 4381.

More detailed information on CICS 1.7 is available via the "NEWS" transaction in CICS.

Microcomputers

Free Software!

Central Stores has received approximately 118 free packages of a program called ALLWAYS. Most of the packages contain 3½" diskettes. If you are interested in getting this package, send your request to Central Stores. Your name will be placed in a hat and the packages will be given away on a lottery type basis.

ALLWAYS is a Lotus Add-In product that lets you create presentation-quality output using up to eight type styles on a single worksheet. It also lets you add bold, single or double underlining, highlight important figures and place boxes around data ranges or use vertical and horizontal lines.

If you have questions about the drawing, call Jim Nelson (4514) at Central Stores.

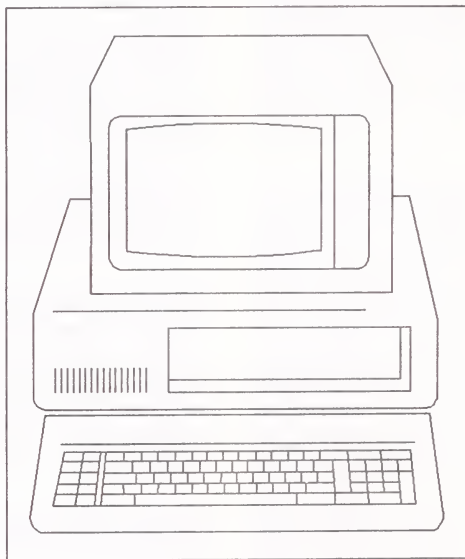
LOTUS DATABASE CLASS: *Is there a need?*

The Information Center would like to present a class in Lotus Database if there is sufficient interest. The class would be fairly advanced. The prerequisites would be Advanced Lotus 1-2-3 with Intermediate Lotus Macros strongly recommended.

Topics contemplated for inclusion are: database creation, sorting, finding and/or extracting specific data

from the database, @ functions that are database specific, one and two way sensitivity tables, and possibly database and table access via macros.

If you are interested in attending such a class, call the Information Center at 2973 and get your name on the list. When you call, **BE SURE TO SPECIFY "LOTUS DATABASE"** or you might get signed up for an Rbase class. If there is enough interest and the class is offered, those on the list will be called and given a chance to sign up first.



AGENCY SECURITY OFFICERS

The following list indicates the persons selected to be responsible for controlling access to each Department's computerized resources. Anyone having problems or questions should contact their Agency Security Officer for assistance.

Should other problems or questions arise, contact:

Central Security Officer
Jack Slevin
@
444-2829

DEPARTMENT/AGENCY	SECURITY OFFICER	PHONE
Dept. of Administration	Jack Slevin alt. Randy Holm	444-2829 444-2824
00 Information Serv.Div.		
01 Accounting Div.		
02 Personnel Div.		
06 Public Employees Retirement Div.		
07 Teachers Retirement Div.		
12 Pub & Graphics		
13 Telecommunications		
16 State Treasure		
17 Purchasing Div. Workers Comp. Court		
57 Personnel Div.		
87 Montana State Library		
Dept. of Commerce	Gary Wulf alt. Guy Stavnes	444-4205
Dept. of Family Services	Pat Gaydos alt. Russ Elser	444-4191
Dept. of Fish Wildlife & Parks	John Hawe alt. Jim Herman	444-3682
Governor's Office	Mary McCullough	444-4863
Dept. of Health	Jim Sveinson alt. Sam Sperry	444-3444
Dept. of Highways	Wayne Schaff alt. Gary Carmony	444-6310

Dept. of Institutions	John Thomas	444-3991
Dept. of Justice	Barney Benkelman alt. John Mathews	444-4532
Dept. of Labor & Industry Employment Security Div	Steve Welsh alt. Keith Routzahn	444-4653
Workers Comp Div.	Bret Brunner	444-6515
Dept. of Lands	Walter Jankowski alt. Al Christianson	444-2074
Legislative Auditor	Mary Reynolds alt. Vickie Rauser	444-3122
Legislative Council	Hank Trenk alt. Tom Mulvaney	444-3064
Legislative Fiscal Analyst	Keith Wolcott alt. Judy Rippingale	444-2986
Dept. of Livestock	Dan Sidor alt. John Skufca	444-2935
Dept. of Military Affairs	Kenneth Grieb alt. Ken Cottrill	444-6959
Dept. of Natural Resource & Conservation	George Cawfield alt. Jack Zanto	444-6714
Public Instruction	Grafton Beasley alt. Steve Colberg	444-3446
Dept. of Public Service Regulation	Madeline Cottrill	444-6199
Dept. of Revenue	Mike Zahn alt. Marlene Campbell	444-3149
Secretary of State	Louise Ross alt. Florence Armagast	444-5382
Dept. of Social & Rehabilitation Services	Eric Hartse alt. Linda Wulf	444-4599
Supreme Court	Patrick Chenovick alt. Jane Hayden	444-2621
Commissioner of Higher Education/University System	Paul Dunham	444-5951

Training Information

All classes will be held in Room 25 of the Mitchell Building and there will be a limit of 12 participants per class, unless otherwise announced.

The cost of the classes are as follows:

<u>Class Name</u>	<u>Subscriber</u>	<u>Non-Subscriber</u>
Basic Terminal Skills	\$50.00	\$50.00
Personal Services/PC	35.00	
Personal Manager	25.00	
Beginning Microcomputer Skills	40.00	60.00
Fundamentals of DOS	40.00	60.00
Intro. to WordPerfect 4.2	60.00	90.00
Advanced WordPerfect 4.2	60.00	90.00
Introduction to WordPerfect 5.0	60.00	90.00
Advanced WordPerfect 5.0	60.00	90.00
Conversion WordPerfect 4.2 to 5.0	40.00	60.00
Introduction to Lotus 1-2-3	60.00	90.00
Advanced Lotus 1-2-3	60.00	90.00
Intro. to Macros for Lotus 123	20.00	35.00
Intermediate Macros for Lotus 123	20.00	35.00
Advanced Macros for Lotus 1-2-3	20.00	35.00
Micro Database Concepts and Design	40.00	60.00
Beginning R:Base	80.00	120.00
Freelance	40.00	60.00
Using Novell Network	25.00	35.00

Training Calendar

Data Network Classes

May 19	Basic Terminal Skills
June 1 am	Personal Services/PC
June 1 pm	Personal Manager
June 29 pm	Using the Novell Network
July 7 am	Personal Services/PC

Microcomputer Classes

May 16	Freelance
May 25	Micro Database Concepts and Design
June 5 & 6 am	Introduction to WordPerfect 4.2
June 6 pm	Introduction to Macros for Lotus 1-2-3
June 7 am	Intermediate Macros for Lotus 1-2-3
June 7 pm	Advanced Macros for Lotus 1-2-3
June 19	Micro Database Concepts and Design
June 20 & 21	Beginning R:Base
June 22 & 23 am	Advanced WordPerfect 4.2
June 26	Beginning Microcomputer Skills
June 27	Conversion of WordPerfect 4.2 to 5.0
June 30	Fundamentals of DOS
July 5 & 6 am	Introduction to WordPerfect 5.0
July 10	Fundamentals of DOS
July 11 & 12 am	Introduction to Lotus 1-2-3
July 17 & 18 am	Advanced WordPerfect 5.0
July 18 pm & 19	Introduction to Lotus 1-2-3
July 20 & 21 am	Introduction to WordPerfect 5.0
July 31 & Aug 1 am	Advanced Features of Lotus 1-2-3

Miscellaneous Training

Great Falls Vocational Technical Center Calendar Offers Workshops for State Employees

The Great Falls Vo-Tech Center is offering the following workshops to any state employees. The cost of each workshop will be \$50.00 per participant.

Intermediate Spreadsheets (Lotus 1-2-3)	May 1-5	7 pm - 10 pm
Beginning Spreadsheets (Lotus 1-2-3)	May 8-12	4 pm - 7 pm
Microcomputer Word Processing (WordPerfect 5.0)	May 8-12	7 pm - 10 pm
DOS and Hard Disk Management	May 15 - 19	4 pm - 7 pm
Intermediate Spreadsheets (Lotus 1-2-3)	May 22 - 26	4 pm - 7 pm
Intermediate Database	May 22 - 26	7 pm - 10 pm

All workshops will be held in Room 203 of the Vo-Tech center. If there is a strong enough interest by any particular agency, the Center is willing to provide training on-site. If you have any questions or would like to register, please contact Mary Ellen Baukol of the Great Falls Vo-Tech Center at 791-2100.

Data Network Classes

BASIC TERMINAL SKILLS: presented by the staff of the Information Center

DATE: May 19, 1989
TIME: 8:30 am to 4:00 pm
PREREQUISITE: 3270nd (interactive class on terminal operation)

BASIC TERMINAL SKILLS is a hands-on workshop to provide experience using computer terminals and the SPF editor. The SPF editor is an easy-to-learn menu used to enter data and programs into the State of Montana central computer system. Entering data, changing data and submitting programs for execution are covered in detail. Also covered are SPF's utility functions and how to track job output.

This course is essential for state government personnel using terminals tied into the State of Montana central computer. This course is a prerequisite for many other ISD classes.

USING PERSONAL SERVICES/PC (PS/PC): presented by Jeanette Rushford or Melanie Coughlin of the Information Center

DATE: June 1, 1989 and July 17, 1989
TIME: 1:00 to 4:00 pm *each day*
PREREQUISITE: Beginning Microcomputer Skills and experience with either WordPerfect or Displaywrite3

PS/PC allows you to electronically send and receive messages or files. A document created by either WordPerfect or Displaywrite3 can be distributed to any other person also using PS/PC by going through DISOSS on the state's mainframe.

To use PS/PC you must have the Personal Services/PC software, the IBM PC 3270 Emulation Program and adapter, and a coaxial cable or phone line connecting your PC to the mainframe.

PERSONAL MANAGER (PM): presented by Jeanette Rushford of the Information Center

DATE: June 1, 1989
TIME: 1:00 to 3:00 pm
PREREQUISITE: Beginning Microcomputer Skills or Basic Terminal Skills

Personal Manager is a calendaring product available through the Division's mainframe. It is used for scheduling meetings (for yourself and others) and vacations, reserving resources like conference rooms, and even taking telephone messages.

Microcomputer Classes

BEGINNING MICROCOMPUTER SKILLS: presented by the staff of the Information Center or the Computer School.

DATE: June 26, 1989
TIME: 8:15 am to 4:30 pm
PREREQUISITE: None

This course will give participants brief hands-on experience with microcomputers. Topics to be covered:

- The machine
- The operating system
- Word processing
- Spreadsheets and graphics
- File management
- Communications

All class time will be spent using microcomputers and software. The participant will learn what microcomputers can do and how to approach them with a positive attitude. This course or its equivalent is a prerequisite for other microcomputer courses.

FUNDAMENTALS OF DOS: presented by Gale Kramlick or Melanie Coughlin of the Information Center

DATE: June 30, 1989 and July 10, 1989
TIME: 8:30 am to 4:30 pm **each day**
PREREQUISITE: Beginning Micro Skills and/or 3 months micro experience

This class is intended for microcomputer users who need to know more about controlling their microcomputer through its operating system. Programming experience is NOT required.

Topics to be covered include:

- What is DOS? Why is it necessary to know about it?
- DOS names for peripherals
- File naming
- Special files like CONFIG.SYS
- Internal commands - DIR, ERASE, RENAME, TYPE, COPY and their variations
- External commands - FORMAT, SYS, DISKCOPY, CHKDSK, MODE
- How to interpret batch files
- Backup procedures

Word Processing Classes

INTRODUCTION TO WORDPERFECT 4.2: presented by the staff of the Information Center or the Computer School.

DATE: June 5 and 6, 1989
TIME: 8:30 am to 3:30 pm - first day
8:30 am to 12:00 noon - second day
PREREQUISITE: Beginning Microcomputer Skills

This course is intended for anyone interested in learning the basics of WordPerfect. This class will concentrate on text creation, use of function keys, editing, formatting, printing, filing, and retrieving documents. Headers, footers, page numbering, merging documents, macro creation, block functions, search and replace and use of the spell checker are also covered. An advanced class for WordPerfect is also available.

ADVANCED FEATURES OF WORDPERFECT 4.2: presented by Gale Kramlick or Melanie Coughlin of the Information Center.

DATE: June 22 and 23, 1989
TIME: 8:30 am to 3:30 pm - first day
8:30 am to 12:00 noon - second day
PREREQUISITE: Beginning Microcomputer Skills and Introduction to WordPerfect 4.2

For those already using WordPerfect, the advanced class will cover footnotes, column generation, advanced macros, advanced merging, and outlining. Adding words to the Speller, using the Thesaurus, sorting capabilities and dual document editing are also covered.

INTRODUCTION TO WORDPERFECT 5.0: presented by the staff of the Information Center or the Computer School.

DATE: July 5 and 6, 1989
July 20 and 21, 1989
TIME: 8:30 am to 3:30 pm - first day
8:30 am to 12:00 noon - second day
PREREQUISITE: Beginning Microcomputer Skills

This class is designed for beginning users of WordPerfect 5.0. Experience with WordPerfect 4.2 is not necessary. The class will take the participants through the fundamentals of creating, printing, and editing documents. The new Setup feature will be discussed. Formatting documents as they are created and after creation will be covered. Some of the time saving features such as spell check, merges, block functions and macros will also be covered.

ADVANCED FEATURES OF WORDPERFECT 5.0: presented by Gale Kramlick
or Melanie Coughlin of the Information Center.

DATE: July 17 and 18, 1989
TIME: 8:30 am to 3:30 pm - first day
8:30 am to 12:00 noon - second day
PREREQUISITE: Beginning Microcomputer Skills
Introduction to WordPerfect 5.0

For those already using WordPerfect 5.0, the advanced class will cover footnotes, column generation, sorting capabilities, dual document editing, changing fonts within a document, creating style sheets and master documents, keyboard layout, compose and graphics.

CONVERSION OF WORDPERFECT 4.2 TO 5.0: presented by Gale Kramlick
or Melanie Coughlin of the Information Center.

DATE: June 27, 1989
TIME: 8:30 am to 4:30 pm
PREREQUISITE: Beginning Microcomputer Skills, Introduction to
WordPerfect 4.2

This class is designed for people in the process of converting from WordPerfect 4.2 to 5.0. Topics of the will cover basic changes like menus, setup options, function key changes, converting document from 4.2 to 5.0 and from 5.0 to 4.2 and Reveal Codes. Some of the advanced features such as Macro Editing, Keyboard Layout, Fonts, Styles, Clip Art Images, Compose, Master Documents, Automatic Referencing, Document Compare and Kerning will also be covered.

Spreadsheet Classes

INTRODUCTION TO LOTUS 1-2-3: presented by the staff of the Information Center or the Computer School.

DATE: July 11 and 12, 1989
July 18 and 19, 1989
TIME: 8:30 am to 3:30 pm on July 11
8:30 am to 12:00 noon on July 12
1:00 pm to 4:30 pm on July 18
8:30 am to 3:30 pm on July 19
PREREQUISITE: Beginning Microcomputer Skills

This course is designed for anyone with little or no previous 1-2-3 or microcomputing experience.

The class will concentrate on 1-2-3 spreadsheet design and commands and the creation of graphics. Printing spreadsheets and graphs is also covered. The more advanced features such as macro programming and database commands are covered in other courses.

Class format consists of lecture and hands-on practice followed by lab time on actual agency spreadsheets for further experience.

Advanced Features of Lotus 1-2-3: Presented by Brett McAlister of the Information Center.

DATE: July 31 and August 1, 1989
TIME: 8:30 am to 3:30 pm - first day
8:30 am to 12:00 noon - second day
PREREQUISITE: Beginning Microcomputer Skills and Introduction to Lotus 1-2-3

This course is designed for anyone who is using 1-2-3 to create spreadsheets for all but the simplest applications. Features covered include: using dates and times within 1-2-3, hiding and/or protecting parts of the spreadsheet, extracting from and combining into spreadsheets, using named ranges, copying values only, advanced print and graph options, additional @ functions, and many other items not covered in Beginning Lotus 1-2-3.

Class consists of lecture, hands-on practice, lab work or question and answer period if time permits.

INTRODUCTION TO MACROS FOR LOTUS 1-2-3: presented by Brett McAlister of the Information Center

DATE: June 6, 1986
TIME: 1:00 pm to 4:30 pm
PREREQUISITE: Introduction to Lotus or equivalent experience

This class will emphasize the importance, effectiveness and the organizational benefits of good spreadsheet design and documentation. The Lotus 1-2-3 spreadsheet program will be used to demonstrate good and bad techniques. Some methods to track down common mistakes and logic problems will be covered.

This class is for 1-2-3 users who have no previous macro experience. Through lecture, video and hands-on practice, participants will learn to write and document timesaving macros.

INTERMEDIATE MACROS FOR LOTUS 1-2-3: presented by Brett McAlister of the Information Center

DATE: June 7, 1989
TIME: 8:30 am to 12:00 noon
PREREQUISITE: Introduction to Lotus 1-2-3

This class is designed for the person who has mastered the concepts presented in Beginning Macros. The primary emphasis in this class is the use of branches and loops to increase the power of the macro. In addition subroutines will be covered as well as the {DEFINE} AND {DISPATCH} commands. More advanced decision making routines will also be presented.

ADVANCED MACROS FOR LOTUS 1-2-3: presented by Brett McAlister of the Information Center

DATE: June 7, 1989
TIME: 1:00 pm to 4:30 pm
PREREQUISITE: Introduction to Lotus 1-2-3

This class is designed for the Lotus 1-2-3 POWER user who designs spreadsheets for others to use. Covered in this class are those aspects of Lotus 1-2-3 and macros that affect the way the spreadsheet is presented to the user. Items such as custom menus, {BEEP}, {PANELOFF}, {PANELON}, {WINDOWSOFF}, {WINDOWSON}, {RECALC}, {BREAKOFF}, and {BREAKON} will be presented.

The user should already be familiar with invoking, creating and editing macros with 1-2-3. The Intermediate Macros class is not a prerequisite.

Database Classes

MICRO DATABASE CONCEPTS AND DESIGN: presented by Brett McAlister or Randy Holm of the Information Center

DATE: May 25, 1989 and June 19, 1989
TIME: 8:30 am to 4:30 pm
PREREQUISITE: Beginning Microcomputer Skills

This class is designed to give participants a primary understanding of what a relational database is and how it compares to other products like Lotus 1-2-3 and PFS:Professional File. The class teaches database design techniques and is a prerequisite for other database classes offered by the Information Center.

BEGINNING R:BASE:: presented by Brett McAlister of the Information Center

DATE: June 20 and 21, 1989
TIME: 8:30 am to 3:30 pm each day
PREREQUISITE: Beginning Microcomputer Skills and Micro Database Concepts and Design

This class will give participants hands-on experience creating a database and developing a simple application with R:Base System V. The application will include database updates, queries, and simple forms and reports generation. "Prompt by Example" and "Express" will be used.

Graphics Classes

Freelance: presented by Gale Kramlick or Jeanette Rushford of the Information Center

DATE: May 16, 1989
TIME: 8:30 am to 4:30 pm
PREREQUISITE: Beginning Microcomputer Skills

This class will give participants hands-on experience using Freelance to create and enhance business graphs with Freelance's extensive freehand capabilities; importing data from Lotus 1-2-3 to create graphs and importing Lotus graphs into Freelance for enhancement.

Time permitting, a lab session will be available for student practice.

Communication and Network Classes

INTRODUCTION TO NOVELL NETWORKS: presented by Teri Lundberg of the Information Center

DATE: June 29, 1989
TIME: 1:00 pm to 4:30 pm
PREREQUISITE: Beginning Microcomputer Skills and FIVE months microcomputer experience

This course is designed for users of Novell Networks. Topics covered include:

The definition of a local area network with emphasis on:

- Token Ring Network
- Logging on to the network
- Directory structure
- Network security
- Supervisor functions
- Drive mappings
- Summary of basic Novell commands

NOTE: This class is not intended for network system administrators or network programming staff. Contact Teri Lundberg at 444-3994 if you have any questions.

ISD CLASS ENROLLMENT APPLICATION
COMPLETE THIS APPLICATION IN FULL AND
RETURN IT TO THE INFORMATION CENTER BUREAU
PRIOR TO THE FIRST DAY OF CLASS

COURSE DATA
Course Requested: _____
Date Offered: _____

STUDENT DATA
Name: _____
Soc Sec Nbr (for P/P/P): _____
Agency & Division: _____
Mailing Address: _____ _____
Phone: _____
How have you met the required prerequisites for this course? Explain giving the class(es) taken, Information Center tutorial(s) completed, and/or experience. _____ _____

BILLING INFORMATION/AUTHORIZATION
Are you an ISD subscribing agency: _____
ISD Billing Number (5 digits): _____
Authorized Signature: _____

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE THREE DAYS BEFORE THE DATE FOR EACH CLASS.

0
REAU



CELLA

DEPARTMENT OF ADMINISTRATION
INFORMATION SERVICES DIVISION
INFORMATION CENTER BUREAU
RM 24, MITCHELL BLDG
HELENA, MT 59620